

B. Amendments to the Claims

- 1 1. (Original) A computer system enabling user directed information research
2 against an authoritatively organized document collection, said computer system
3 comprising:
 - 4 a) a database storing first data identifying a set of authoritative statements
5 present within the documents of said predetermined authoritative document
6 collection, second data specifying the locations of the authoritative assertions of
7 said set of authoritative assertions within the documents of said predetermined
8 authoritative document collection, third data specifying correlated associations
9 between the authoritative assertions of said set of authoritative assertions within
10 the documents of said predetermined authoritative document collection; and
 - 11 b) a processor, coupleable to said database, operative to generate a mesh
12 representational view of the correlated associations between the authoritative
13 assertions of said set of authoritative assertions and wherein said processor is
14 responsive to user input for navigation through said mesh representational view
15 and user determined selection of a subset of said set of authoritative assertions.
- 1 2. (Original) The computer system of Claim 1 wherein said third data defines
2 relative distance weighted, directional associations between the authoritative
3 assertions of said set of authoritative assertions within the documents of said
4 predetermined authoritative document collection.
- 1 3. (Original) The computer system of Claim 2 wherein the authoritative
2 assertions of said set of authoritative assertions are representable as nodes within
3 said mesh representational view and wherein said third data determines the
4 relative interconnection of said nodes within said mesh representational view.
- 1 4. (Original) The computer system of Claim 3 wherein said database further
2 stores fourth data identifying authoritative citations in correspondence with the
3 authoritative assertions of said set of authoritative assertions, wherein selection of
4 said subset includes selection of the corresponding authoritative citations, said
5 processor being further operative to generate a literate report of said subset of
6 said set of authoritative assertions and corresponding authoritative citations.

1 5. (Original) The computer system of Claim 4 wherein generation of said
2 literate report includes syntactic processing of said subset of said set of
3 authoritative assertions.

1 6. (Original) The computer system of Claim 5 wherein generation of said
2 literate report includes reformation of said corresponding authoritative citations
3 dependent on the order of occurrence of said corresponding authoritative citations
4 within said literate report.

1 7. (Original) The computer system of Claim 6 wherein generation of said
2 literate report includes maintenance of predetermined report content provided in
3 response to user input relative to said subset of said set of authoritative assertions
4 and corresponding inclusion of said predetermined report content in said literate
5 report.

1 8. (Original) The computer system of Claim 7 wherein said processor is
2 operative to maintain source versions of said subset of said set of authoritative
3 assertions, said corresponding authoritative citations, and said predetermined
4 report content for reference in connection with the syntactic processing of said
5 subset of said set of authoritative assertions, including said predetermined report
6 content, and the reformation of said corresponding authoritative citations.

1 9. (Withdrawn) A method of performing information research against an
2 authoritatively organized document collection, wherein the method is supported
3 by a computer-implemented framework operating against a computer accessible
4 database representation of the authoritatively organized document collection, said
5 method comprising the steps of:
6 identifying, in response to user input, a selected authoritative assertion
7 occurring within a selected document of a predetermined document collection
8 containing authoritatively organized information;
9 associating a plurality authoritative assertions, which occur within the
10 documents of said predetermined document collection, with said selected
11 authoritative assertion based on weighted relationships derived from the relative
12 mutual occurrence of said selected and plurality of authoritative assertions within
13 the documents of said predetermined document collection;

14 generating a representational view of said plurality of authoritative
15 assertions organized to reflect said weighted relationships, wherein said
16 representational view enables user directed navigation over said plurality of said
17 authoritative assertions;
18 selecting, in connection with said user directed navigation, a subset of said
19 plurality of authoritative assertions, wherein the authoritative assertions of said
20 subset are provided in a determined order; and
21 preparing a literate report incorporating said subset in said determined
22 order.

1 10. (Withdrawn) The method of Claim 9 wherein said step of preparing
2 provides for the syntactic processing of said subset to improve the literate
3 presentation of the authoritative assertions of said subset in said determined
4 order.

1 11. (Withdrawn) The method of Claim 10 wherein authoritative citations exist
2 in correspondence with the authoritative assertions, wherein said step of preparing
3 includes incorporating a predetermined set of authoritative citations,
4 corresponding to the authoritative assertions of said subset, into said literate
5 report.

1 12. (Withdrawn) The method of Claim 11 wherein said step of preparing
2 further provides for the reformation processing of said predetermined set of
3 authoritative citations to improve the literate presentation of said predetermined
4 set of authoritative citations in said literate report relative to said determined
5 order.

1 13. (Withdrawn) The method of Claim 9 wherein said step of associating a
2 plurality authoritative assertions includes the steps of:
3 a) determining a first authoritative citation associated with a first
4 authoritative assertion; and
5 b) locating a second authoritative assertion that is referenced by said first
6 authoritative citation and semantically correlated with said first authoritative
7 assertion.

1 14. (Withdrawn) The method of Claim 13 wherein said step of locating said
2 second authoritative assertion includes the step of comparing a semantic similarity
3 metric computed for said first authoritative assertion with semantic similarity
4 metrics computed for each of the authoritative assertions referenced by said first
5 authoritative citation to distinguish said second authoritative assertion.

1 15. (Withdrawn) The method of Claim 13 wherein said step of locating said
2 second authoritative assertion includes the step of comparing a semantic similarity
3 metric computed with respect to said first authoritative citation with semantic
4 similarity metrics computed for each of the authoritative assertions referenced by
5 said first authoritative citation to distinguish said second authoritative assertion.

1 16. (Withdrawn) The method of Claim 9 wherein said step of generating said
2 representational view includes the steps of:
3 a) first determining as said weighted relationships a set of relative distance
4 weighted, directional associations describing the mutual associativity of the
5 authoritative assertions within said plurality of authoritative assertions; and
6 b) second determining an attributed representation of said set of relative
7 distance weighted, directional associations as a mesh interconnecting nodes
8 representing said plurality of authoritative assertions as said representational view.

1 17. (Withdrawn) The method of Claim 16 wherein authoritative assertions have
2 corresponding authoritative citations and wherein said step of first determining
3 provides said set of relative distance weighted, directional associations relative to
4 authoritative assertions having different corresponding authoritative citations.

1 18. (Withdrawn) The method of Claim 17 wherein said step of first determining
2 further provides said set of relative distance weighted, directional associations
3 relative to authoritative assertions having the same corresponding authoritative
4 citations.

1 19. (Withdrawn) The method of Claim 18 wherein said step of second
2 determining selectively provides said mesh based on said set of relative distance
3 weighted, directional associations relative to authoritative assertions having

4 different corresponding authoritative citations and relative to authoritative
5 assertions having the same corresponding authoritative citations.

1 20. (Withdrawn) A computer system providing a framework for information
2 research over an authoritatively organized document collection containing
3 authoritative statements including authoritative assertions coupled with
4 authoritative citations, said computer system comprising:

5 a) a computer database storing reference data derived from said document
6 collection associating the mutual relative occurrence of said authoritative
7 assertions occurring within the documents of said document collection, said
8 reference data further associating first authoritative assertions through first
9 authoritative citations to second authoritative assertions, wherein said second
10 authoritative assertions are disambiguated relative to said first authoritative
11 citations by a predetermined metric of semantic similarity; and

12 b) a processor coupleable to said computer database implementing a first
13 framework module operable to display a representation of said reference data,
14 a second framework module operable to enable user selection of a research set
15 of authoritative assertions, and a third framework module operable to generate
16 a report of said research set of authoritative assertions.

1 21. (Withdrawn) The computer system of Claim 20 wherein said reference data
2 includes weight values reflecting the mutual relative distance of occurrence of said
3 authoritative assertions occurring within the documents of said document
4 collection and wherein said weight values determine the default ordering of said
5 authoritative assertions in said research set.

1 22. (Withdrawn) The computer system of Claim 21 wherein said weight values
2 further reflect a cluster association of a predetermined authoritative assertion
3 relative to a predetermined authoritative citation.

1 23. (Withdrawn) The computer system of Claim 22 wherein said representation
2 produced by said first framework module is a mesh representation of a selected
3 subset of said reference data and wherein said selected subset is determined by
4 user directed navigation of said mesh representation.

1 24. (Withdrawn) The computer system of Claim 23 wherein user selection of
2 said research set is determined in conjunction with user directed navigation of
3 said mesh representation.

1 25. (Withdrawn) The computer system of Claim 24 wherein said third
2 framework module is operative to grammatically process said research set of
3 authoritative assertions to provide said report as a literate report.

1 26. (Currently Amended) A computer-based system for developing a
2 compilation of authoritative knowledge, said computer-based system comprising:
3 a) a first database of authoritative knowledge including an authoritative
4 document collection including first and second documents, said first database
5 including a plurality of authoritative statements present within said authoritative
6 document collection, wherein each said authoritative statement includes at least
7 one authoritative assertion and at least one authoritative citation;
8 b) a second database of weight values interrelating said plurality of
9 authoritative statements, wherein said weight values include a predetermined
10 reference weight value that interrelates a first authoritative assertion of a first
11 authoritative statement present within said first document with a second
12 authoritative assertion present within said second document, wherein said first
13 authoritative statement includes a first authoritative citation that identifies a
14 defined sub-portion of said second document, wherein said first authoritative
15 assertion is semantically identified with said second authoritative assertion within
16 said defined sub-portion of said second document, and wherein said
17 predetermined reference weight value represents the correlated semantic
18 associativity of said first and second authoritative assertions dependent on said
19 first authoritative citation;
20 c) a viewer, coupled to said first and second databases, enabling
21 presentation of a subset of said plurality of authoritative statements including a set
22 of identified authoritative statements and a set of supplemental authoritative
23 statements, wherein said set of supplemental authoritative statements is
24 successively selected based on associations determined from said second
25 database of weight values and relative to said set of identified authoritative
26 statements;

27 d) first controls, coupled to said viewer, operative to influence the selection
28 of said set of supplemental authoritative statements; and
29 e) second controls, coupled to said viewer, operative to produce a report
30 of said set of identified authoritative statements.

1 27. (Original) The computer-based system of Claim 26 wherein said first
2 controls are operative to include authoritative statements of said set of
3 supplemental authoritative statements in said set of identified authoritative
4 statements.

1 28. (Original) The computer-based system of Claim 27 further comprising a
2 parser operative on said report to initially determine said set of identified
3 authoritative statements.

1 29. (Original) The computer-based system of Claim 28 wherein said report is
2 a literate report of said set of identified authoritative statements.

1 30. (Currently Amended) An apparatus for processing a document collection
2 to enable authoritative information research, said apparatus comprising:
3 a) a database that provides for the storage of data with respect to a set of
4 authoritative assertions occurring within the documents of a predetermined
5 authoritative document collection; and
6 b) a processor coupleable to access the documents of said predetermined
7 authoritative document collection ~~and further coupleable to store first and second~~
8 ~~data to said database~~, said processor being operative to generate first data
9 identifying said set of authoritative assertions, said first data further identifying the
10 locations of said set of authoritative assertions within the documents of said a
11 predetermined authoritative document collection, said processor being further
12 operative to generate second data containing a weighted correlation of the
13 mutual relative occurrence of the authoritative assertions of said set of
14 authoritative assertions within the documents of said predetermined authoritative
15 document collection, and wherein said processor provides for the storage of said
16 first and second data in said database,

17 whereby said first and second data provides an authoritatively related basis
18 for analyzing the documents of said predetermined authoritative document
19 collection.

1 31. (Original) The apparatus of Claim 30 wherein said second data further
2 contains weighted correlations representing semantic similarity of the authoritative
3 assertions of said set of authoritative assertions.

1 32. (Original) The apparatus of Claim 31 wherein said first and second data
2 defines a weighted correlation mesh interrelating the authoritative assertions of
3 said set of authoritative assertions.

1 33. (Currently Amended) The apparatus of Claim 32 wherein said weighted
2 correlations include directional information reflecting the ordered of occurrence
3 of the authoritative assertions of said set of authoritative assertions within the
4 documents of said predetermined authoritative document collection such that said
5 first and second data defines a directionally weighted correlation mesh,
6 whereby said first and second data provides a directed basis for analyzing
7 the ordered occurrence of conceptual issues represented by sequences of
8 authoritative assertions occurring within said set of authoritative assertions.

1 34. (Currently Amended) The apparatus of Claim 33 wherein said second
2 data, as generated by said processor, correlates first and second predetermined
3 authoritative assertions by a weighted ordered distance metric derived by analysis
4 of the mutual relative locations of said first and second predetermined
5 authoritative assertions within documents of co-occurrence of said predetermined
6 authoritative document collection.

1 35. (Original) The apparatus of Claim 34 wherein said processor, in
2 generating said second data, computes a semantic affinity metric for the
3 authoritative assertions of said set of authoritative assertion as a basis for
4 establishing conceptual content associations between the authoritative assertions
5 of said set of authoritative assertions.

1 36. (Original) The apparatus of Claim 35 wherein said second data, as
2 generated by said processor, includes cluster association information for the
3 authoritative assertions of said set of authoritative assertions, wherein said cluster
4 association information is determined based on said semantic affinity metric as
5 computed for each of the authoritative assertions within said set of authoritative
6 assertions.

1 37. (Withdrawn) A method of preparing a document collection research
2 database to support information analysis and reporting, said method comprising
3 the steps of:
4 a) processing the documents of a predetermined authoritative document
5 collection to locate authoritative assertions;
6 b) determining weighted correlations of the mutual occurrence of
7 authoritative assertions in the documents of said predetermined document
8 collection; and
9 c) storing reference data to a research database including references to
10 said located authoritative assertions and said weighted correlations, wherein said
11 weighted correlations are stored in a defined correspondence with said located
12 authoritative assertions,
13 whereby the weighted correlations between authoritative assertions provide
14 an associative basis for analyzing the informational content of said predetermined
15 authoritative document collection.

1 38. (Withdrawn) The method of Claim 37 wherein said weighted correlations
2 reflect the ordered occurrence of mutually associated authoritative assertions
3 within the documents of said predetermined document collection.

1 39. (Withdrawn) The method of Claim 38 wherein first authoritative assertions
2 are coupled with authoritative citations and wherein said weighted correlations
3 reflects the association of said first authoritative assertions by reference through
4 authoritative citations to second authoritative assertions.

1 40. (Withdrawn) The method of Claim 39 further comprising the step of
2 identifying, for a predetermined first authoritative assertion, a predetermined said
3 second authoritative assertion based on said authoritative citation coupled with

4 said predetermined first authoritative assertion and a semantic affinity metric
5 computed for said predetermined first and second authoritative assertions.

1 41. (Withdrawn) The method of Claim 40 wherein said weighted correlations
2 reflects the affinity of the said authoritative assertions to semantically affine
3 clusters of authoritative assertions, the weighted ordered distance between
4 authoritative assertions within a first predetermined limit, and the semantic affinity
5 and ordered distance between said clusters within a second predetermined limit.

1 42. (Withdrawn) A method of disambiguating authoritative citations
2 establishing references to documents within an authoritative document collection
3 to support a process of authoritative information analysis, wherein said method
4 is autonomously performed by a computer system having access to the documents
5 of said authoritative document collection, said method comprising the steps of:
6 a) identifying, within a first document of a document collection, a first
7 authoritative assertion associated with a first authoritative citation;
8 b) determining, within a second document of said document collection
9 specified by said first authoritative citation, a set of authoritative assertions; and
10 c) selecting a second authoritative assertion from said set of authoritative
11 assertions based on a semantic similarity metric computed for said first
12 authoritative assertion and each authoritative assertion of said set of authoritative
13 assertions, said second authoritative assertion having a greater semantic
14 correlation to said first authoritative assertion.

1 43. (Withdrawn) The method of Claim 42 further comprising the step of
2 constructing a reference database storing data representative of the association
3 of said first and second authoritative assertions.